

Thomas Newman, CPG
HOLNAM INC.
GeoTechnical Services Department
4629 N. Overland Trail, Bldg. A
P.O. Box 1468
LaPorte, CO 80535-1468
970-215-6110

RECEIVED
SL FIELD
OFFICE

01 SEP 14 AM 11 42

DEPT OF INTERIOR
BUR. OF LAND MGMT

Date: 9-11-01

HOLNAM

To:

Cheryl Martinez
Mike Ford
Geologists
BLM Field Office
2370 South 2300 West
Salt Lake City, UT 84119
801,977,4360
801-977-4397fax

RECEIVED

SEP 27 2001

DIVISION OF
OIL, GAS AND MINING

**Subject: Plan of Operations - Diatomaceous Earth Quarry – Skull Valley, UT
Cover Letter – September 11, 2001**

Dear Cheryl and Mike,

Attached is a Plan of Operations request for the Diatomaceous Earth Deposit in Skull Valley, Utah.

The Plan of Operations is a continuance at the same location as the 'Notice: Disturbance of 5 acres or less' in 2000 and amended in 2001 (U-77753).

Please review the request to completeness and accuracy. Any questions will be promptly answered and any additional information can be quickly forwarded to you.

Yours and Mike's efforts are deeply appreciated.

Sincerely,



Thomas Newman, CPA

CC: Roy Stienmier – Holnam Chief Geologist
Dave Nelson – Holnam Attorney
Todd Richards – Holnam Legal Corporate Counsel
Chester Goodson – Holnam Devil's Slide Plant Manager
Chris Robinson – CRLL

Plan of Operations Request – September 11, 2001

To:

Cheryl Martinez
Mike Ford
Geologists
BLM Field Office
2370 South 2300 West
Salt Lake City, UT
84119

SEP 14 2001
RECEIVED
SEP 27 2001
DIVISION OF
OIL, GAS AND MINING

Subject: Plan of Operations – submitted September 11, 2001

- Plan of Operations – 43 CFR Ch. II, Subpart 3809
(New Regulations) (Federal Register/Vol. 65, No. 225/ Tuesday, 11-21-00)
- Skull Valley, Utah – Diatomics Claims 1-8, Tooele County, UT
- Diatomaceous Earth Deposit

Dear Cheryl and Mike,

3809.401

As required by 43 CFR 3809, this letter serves to notify the BLM District (Field) Office of the proposed Plan of Operations for the Skull Valley Diatomaceous Earth Pit in Tooele County, Utah.

3809.401

The Plan of Operations is a continuance of surface mining activities from a 'Notice: Disturbance of 5 acres or less' submitted under the preexisting 3809 regulations and approved by the BLM in 2000 and amended in 2001 (Attached).

3 acres were disturbed during the 'Notice: Disturbance of 5 acres or less'. The 3 acres (plus an additional 2 acres from previous occupants) were reclaimed in accordance to the approved 'Notice: Disturbance of 5 acres or less'.

3809.401 (b)(1)

Claimant and Operator

The name and address of the mining claimant and operator are listed below:

Owner (Claimant) - Castle Rock Land and Livestock LC

Christopher Robinson, Manager
Castle Rock Land and Livestock LLC i.e. ("CRL")
139 E. South Temple, Suite 310
Salt Lake City, UT 84111

801,328,1600,
801,328,1616fax

Operator – Holnam Inc

HOLNAM INC.
Tom Newman, Sr. Geologist
GeoTechnical Services Department
4629 N. Overland Trail, Bldg. A
P.O. Box 1468
LaPorte, CO 80535-1468

970-482-5600 ext. 707
970-482-5608fax

Holnam Inc Tax Payer Identification Number: 38-294-3735

38909.401 (b)(1)

Mining Claims Information:

The Name and Serial Numbers for the placer claims are:

- Diatomics Placer Claims 1,2,3,4,5,6,7,8
- UMC 362247, 362248, 362249, 362250, 362256, 362252, 362253, 364711

Specific Placer Claims where initial disturbance will occur at the adjacent corners of:

- Diatomics Placer Claims 3,4,5,8
- UMC 362249, 362250, 362256, 364711

3809.401 (b)(2)(i)

Location:

Attached is a map detailing the location of the Diatomics Placer Claims.

CRLI will be performing surface mining activities for removing diatomaceous earth from the Diatomics Placer Claims and reclamation afterward. The Claim's locations are:

Subsection, Section, Township and Range location of the Placer Claims are in:

SW1/4 of Sec.6, T6S, R7W in Skull Valley, Tooele County, UT.

E1/2 of Sec. 18, T6S, R7W in Skull Valley, Tooele County, UT.

NE1/4 of Sec. 7 and NW1/4 of Sec. 7 and the SE1/4 of Sec. 7 and N1/2 SW1/4 of Sec. 7 and SE1/4 SW1/4 of Sec. 7, T6S, R7W in Skull Valley, Tooele County, UT.

All activities are on Federal Bureau of Land Management land, both surface and subsurface

The area is depicted on the USGS 7.5 Min. Topographic Map – 'Terra, Utah'

3809.401 (b)(2)(ii)and (viii)

Attached is a map showing mining areas and related activities for the Plan of Operations.

No new dirt roads are planned so the existing road locations and acreage will stay the same.

Should any new roads need to be constructed, the BLM will be notified before any construction begins. 3809.420 (c)(1)(iii)

Only acreage that will be immediately mined (and the adjacent Overburden stockpile site) will be disturbed. Approximately 4 acres (3 acres mined and 1 acre for Overburden stockpile) per year will be disturbed. It is the same acreage that is described in the mining activities, plus the stockpile site.

No maintenance facilities or other mine related structures will be kept on site, therefore no acreage will be disturbed for buildings.

DISTRUBANCE SUMMARY

Past un-reclaimed surface disturbance as of September, 2001 - 0 acres
(excluding all dirt roads)

Past reclaimed surface disturbance as of August, 2001 - 5 acres

Anticipated acres of surface disturbance per year - 4 acres

Anticipated acres of surface to be reclaimed per year - 4 acres

3809.401 (b)(2)(iii)

WATER MANAGEMENT

As the Pit is below grade, any erosion will be internal in the Pit.

Normal precipitation quickly evaporates in the arid desert environment. Torrential rainfall would only temporally collect in the Pit. The diatomaceous earth quickly absorbs water and evaporates. Mining activities can stop until the ground is dry.

FLASHFLOODING

Flash flooding occurs in the area. The existing road is not designed to withstand flash flooding. Should one occur, reconstruction of the road would be necessary. Any crushed rock road base that is washed out will be collected and returned for use to rebuild the road. Reconstruction would be at the same location previous to flooding.

3809.401 (b)(2)(iv)

DIATOMACEOUS EARTH CHARACTERIZATION AND HANDLING

The surface morphology of the area consists of alluvial fan debris composed of gravel's and sands and small-unconsolidated ridges and gullies formed by ancestral erosion most probably flash flooding events. The area has already been disturbed by agricultural activities and past mineral extraction.

The diatomaceous earth is on or near the surface. The diatomaceous earth is tan colored, lightweight, soft, friable, loose, unconsolidated, earthy and without substantial structure. It has the consistency of dry dirt.

Surface mining is the only viable method available for removing the diatomaceous earth.

No explosives are going to be used for the removal of diatomaceous earth.

The diatomaceous earth surface mining will start in the existing diatomaceous earth pit in Section 7 T6S, R7W. The surface mine site is along an existing dirt road.

The Plan calls for approximately 30,000 tons per year of the diatomaceous earth to be removed to produce pozzolanic cement at Holnam Inc.'s Devil's Slide cement plant. The schedule will be dependent upon market factors that affect the sale of Holnam's pozzolan products.

Excavation will be by the open pit mining method like the 'Notice: Disturbance of 5 acres or less', previously submitted in 2000 and amended in 2001(attached).

Mining will be by a campaign schedule where a large tonnage will be removed at one time and periods where no mining activity will occur.

The top 1 to 3 feet of Overburden including a 'seed horizon' will be stockpiled for use as a final cover over the reclaimed pit.

3809.401 (b)(2)(v)

QUALITY ASSURANCE

Geological sampling has shown the diatomaceous earth is consistent in quality throughout the Plan of Operations area. Quality and quantity sampling will continue throughout the Plans life. Quality assurance is via the removal of Overburden and keeping the diatomaceous earth free of debris and contaminants such as oils and lubricants.

3809.401 (b)(2)(vi)

SPILL CONTINGENCY PLAN

No water, hazardous materials or explosives will be used. All motor fuel and greases will be stored within the vehicles. Any minor spills will be cleaned up and disposed of at the truck maintenance shop. Any major spills will be reported and cleaned up via environmental contractors. 3809.420 (b)(2), (B), (C)

Any and all toxic materials will be collected and removed from Federal property and properly disposed of in accordance to Federal, State and County regulations and laws. 3809.420 (c)(8)(i-ii)

3809.401 (b)(2)(vii)

SCHEDULE OF OPERATIONS

CRLL's Plan of Operations will reopen the existing pit and continue the surface mining activities that began with the 'Notice: Disturbance of 5 acres or less', previously submitted in 2000 and amended in 2001.

The Plan of Operations designates the removal of 30,000 short tons of diatomaceous earth per year. Market forces will dictate the exact amount removed per year.

One acre of land contains approximately 10,000 short tons of diatomaceous earth. Therefore the 30,000 tons of diatomaceous earth removed per year will disturb 3 acres. In addition one acre will be needed as an Overburden stockpile site (3 acres for mining and 1 acre for Overburden = 4 acres total).

DATES OF OPERATION

The starting date for the Plan of Operations is January 1, 2002.

The Plan of Operation calls for a 'campaign' method of mining, i.e. it is CRLL's intention to remove a large tonnage, i.e. 30,000 short tons of diatomaceous earth at any one time.

No ending date is projected at this time, the exact time for the campaign surface mining per year will be determined by market conditions.

The operating period will be in continuous 7-day periods consisting of 10-hour days during daylight hours. This Plan is contingent on weather conditions of the time. If poor weather conditions prevail, then an alternative time schedule will be implemented.

Operating periods will be nine to twelve weeks of campaign surface mining. It is anticipated that mining will occur on an annual basis and be performed as one event per year. Campaign operations: 10 hour/day, 7 day/week, for nine to twelve weeks.

Five people will be involved in surface mining:

- Supervisor
- Front end loader/ bull dozer operator
- Three overland truck drivers at any one time

During mining operations and non-operational times if public safety hazards or conditions exist then signs, fences or other measures will be erected to identify them. If warranted then public access will be restricted from specific mining sites. 3809.800 and 3721.1

Reclamation work will be carried out at the end of each campaign activity.

At the end of each campaign the entrances to the dirt road from the paved highway will be bermed to restrict access to the diatomaceous earth pit in the same way as the 'Notice: Disturbance of 5 acres or less'. (attached)

Mining equipment will be moved off site during periods of non-operation.

Please note that sheep and cattle grazing will continue during mining periods of non-operational periods.

3809.401 (b)(2)(vii)

MINING

No milling or processing facilities will be on site. No power lines or pipelines will be on site. No permanent nor temporary structures will be built. No camping or camping trailers will be on site. No fuel storage tanks will be on site. No explosives are going to be used for the removal of diatomaceous earth.

Mining equipment will be parked within the pit area.

The perimeter of each campaign mine area will be flagged. Markers are made of wooden laths with colored biodegradable flagging tape. 3809.420 (c)(10)(i-iii)

1 to 3 feet of Overburden composed of gravel and dirt with seed bearing horizons overlie the diatomaceous earth. CRL will stockpile this material for later use in reclamation. 3809.420 (c)(5)

The Plan will remove diatomaceous earth in the existing diatomaceous earth pit using a front-end loader. Mining is simply digging into the diatomaceous earth and loading each bucket into a truck. The nature of the front-end loader and the freestanding nature of the diatomaceous earth usually create high walls. The maximum height of the high wall will be 25 feet.

Any high walls created during mining that would pose a public safety issue will be clearly marked with stakes, ropes and/or flagging. 3809.420 (c)(10)(i-iii)

A single front-end loader will perform all the loading of the trucks and assist in reclamation activities

CRLL will use a standard bulldozer to stockpile the Overburden and during reclamation activities to be used to re-contour the pit and spread the Overburden as the final cover.

CRLL will use a standard earth moving front-end loader to dig the diatomaceous earth and to load overland dump trucks in the pit. Once the trucks are loaded they will use dust control systems while on county, state and federal roads.

Below is the type and number of trucks that will be used during the surface mining operation. The approximate number of ingress and egress (counting as roundtrips) off the existing all weather asphalt road will be kept to a minimum.

Haul Truck Type = 18 Wheel End Dump Trucks and Trailer 'Pups' with rated capacity of approximately 30 tons. Note that the diatomaceous earth is very light weight and that the truck will never carry its rated amount of tonnage. Three trucks will be used at any one time.

The Haul Trucks will use existing all-weather asphalt paved roads as soon as possible. As total truck bed capacity is vital to the success of the operation, spillage of the diatomaceous earth will be kept to a minimum. The trucks and trailers will have tarps and/or covers to control dust while in transit.

At the end of campaign activity the dirt roads will be bermed at the asphalt entrances during period of non-operations as was done with the 'Notice: Disturbance of 5 acres or less'.

EXPLORATION ACTIVITIES

On occasion small core drilling activities to a maximum depth of 100 feet will be performed in advance of the pit development. Exploration activity will consist of a small track mounted core-drilling unit. The unit will only operate in areas that are declared free of archaeological sites by the BLM. The unit is small and creates little disturbance. The BLM will be notified before any exploration activities occur. All State and Local regulations will be enforced.

All exploration drill holes will conform to the standards in 3809.420 (c)(2)(i-iii)

3809.401 (b)(2)(viii)

ACCESS

The area has numerous dirt roads that have existed for decades. The Plan intends to use only existing roads that are depicted on the topographic map USGS 'Terra, UT'. CRLL and its Operator will conform to 3809.420 (c)(1) (ii).

There are no pipelines or power or utility services in the immediate are of disturbance. There will be no construction of any type of utility, electric, water, gas, etc.

An enlargement of the Terra, UT 7.5' USGS Topographic map is attached showing the location of existing access roads that will be used for removing the diatomaceous earth.

The mine site is along an existing improved dirt road with a crushed rock base. All attempts will be made to use the existing dirt road. The road is on the topographic surface of the site. Previous to this activity and the 'Notice: Disturbance of 5 acres or less', some down cutting has occurred due to the soft nature of the diatomaceous earth. The down cutting occurred before 2000. Any future down cutting will be stopped by routine maintenance of the road. CRLL and its Operator will conform to 3809.420 (c)(1) (ii).

Road maintenance is planned because the diatomaceous earth on the surface is soft and will not support vehicle traffic. A crushed rock road base is necessary for equipment to travel to and from the diatomaceous earth pit. When necessary crushed rock will be used as a road base. The removal of the crushed rock road base (when mining is completed) will be done if advised by the US BLM. CRLL and its Operator will conform to 3809.420 (c)(1) (i).

Surface disturbance will be kept to a minimum using the existing road. The road will be kept at the minimum width necessary for equipment movement.

Berms of diatomaceous earth are along the sides of the road. They are 1-3 foot high and were constructed when the road was built. As the berms are composed of seed bearing horizons they will be kept and used in the final reclamation of the road or used elsewhere if BLM asks for retention of the dirt roads. CRLL and its Operator will conform to 3809.420 (c)(1) (iv).

There are no plans for surfacing the dirt road.

Neither surface water nor the expression of water channels exists along the dirt road; therefore no culverts are planned.

The road specifications are:

Width - 14- 18 feet

Length (from paved road to paved road) - 0.6 mile

Surface - diatomaceous earth with a cover of crushed limestone

Culverts - none - no water channels cross the road

Berms - 1-3 foot high on either side of the road

3809.401 (b)(3)(i)

DRILL HOLES PLUGGING

If any drill holes are drilled during exploration activities they will be plugged to prevent mixing of waters from the surface or subsurface (note that the groundwater is of unknown depth or existence - regardless, all drill holes will be plugged from bottom to top). 3809.420 (c)(2)(i-iii)

No drilling fluids will be used – core-drilling method is by compression (push tube).

The surface of any drill holes will be plugged to prevent direct inflow of surface water and to eliminate the open-hole hazard.

Activities will be in compliance with 3809.420 (c)(2) (i-iii).

3809.401 (b)(3)(ii) & (iii)

GENERAL OVERVIEW

Surface mining will take advantage of the already disturbed site. All Overburden (seed horizons) will be stockpiled and reused as the final re-contoured surface layer. Existing dirt roads will be used for access. Upon the BLM's direction the dirt roads used for hauling will be scoured, re-seeded and fertilized when mining is finished.

3809.401 (b)(3)(ii)

REGRADING AND RESHAPING

The reclamation Plan calls for the diatomaceous pit to be re-contoured into a broad, shallow depression. The pit will be reshaped to blend with the pre-mining surrounding natural topography. The slopes will be stable to minimize erosion and facilitate re-vegetation. 3809420 (c)(6) (i-ii)

Any Pit erosion will be internal and be deposited into the bottom of the pit. The eroded material is diatomaceous earth and will be collected and used as mine material. Erosion outside the Pit will be kept to a minimum using engineering designs, mechanical barriers, vegetation, and etc. 3809.420 (c)(6)(iii)

3809.401 (b)(3)(iii)

RECLAMATION

The removal of diatomaceous earth will be by campaign method, as such, at the earliest feasible time; stockpiled Overburden will be used as cover for areas where diatomaceous earth was removed. This was the successful method used in the previous 'Notice: Disturbance of 5 acres or less'. 3809.420 (a)(5)

Reclamation shall be:

- the saving of Overburden and seed bearing horizons for use as a final application after reshaping of disturbed areas
- the pit will be reshaped to conform as best as possible to surrounding topography, application of seed bearing horizon Overburden will be put over the surface, and a seed and fertilizer mixture distributed over disturbed areas - the seed mixture and application plan will be approved by the BLM
- re-seeding and fertilizing will be between Oct. 1 and March 15 to take advantage of the cool season precipitation

- There are no fisheries nor fish habitats within the immediate ecological area where the diatomaceous earth will be removed. No surface waters existed on or near the diatomaceous earth.
- Wildlife habitat will be restored with the successful re-vegetation of the disturbed areas 3809.420 (c)(6)
- when reclamation of the disturbed area has been completed a BLM official will be notified so that an inspection of the area can be made
- the owner and operator fully expect and welcome BLM officials to monitor the operations to ensure that activities are not causing unnecessary or undue surface degradation
- the owner and operator understand that any failure to prevent undue or unnecessary degradation or to complete reclamation will cause a notice of noncompliance from the Federal BLM Agency

The area of disturbance is above any existing water table.

Reclamation will consist of re-contouring any equipment track depressions and contouring the pit to a shallow slope.

For the surface mine site, the seed bearing horizon will be stockpiled and returned as the final layer after re-contouring.

Re-vegetation activities will be per BLM instructions. Reseeding will consist of an approved grass seed mixture. Grass seed and fertilizer will be broadcast over the pit site as the final reclamation activity. Upon directions from the BLM the existing dirt road used by the haul trucks will be scoured, re-seeded and fertilized and bermed. 3809.420 (c)(5)

Note: The areas being re-vegetated are in an arid desert environment. Successful re-vegetation is dependent on the yearly amount of rain the area will receive. Should the first attempt at reseeded be unsuccessful than additional applications and measures will be attempted.

FLASHFLOODING

Flash flooding occurs in the area. The existing road is not designed to withstand flash flooding. Should one occur, reconstruction of the road would be necessary and the BLM Field Office will be notified. Any crushed rock road base that is washed out will be collected and returned for use to rebuild the road. Reconstruction would be at the same location previous to flooding.

3809.401 (b)(4)

MONITORING PLAN

CRLL and its Operator will be responsible and accountable for compliance with the approved Plan of Operations.

At the start and finish of each campaign mining activity CRLL and the Operator will survey and photograph the area of disturbance for documentation.

A Report for each campaign mining activity will be sent to the BLM Field Office detailing:

- the total acreage of disturbance for the most recent campaign mining period
- the total acreage that was reclaimed after the campaign mining period
- report on re-vegetation / re-seeding monitoring and activities
- maps and photographs showing the areas of reclamation and future areas to be mined
- any sign, fencing, flagging or other surface identifiers and their location and use

Immediate Notifications:

- should any environmental damage occur, i.e. flash flooding, large oil spills, grass fires, illegal dumping or vandalism occur, the BLM Field Office will be notified immediately
- notify the BLM Field Office for archaeological reviews in areas that have not been surveyed prior to disturbance
- should any archaeological sites or objects be discovered, the BLM Field Office will be notified immediately per 308.420 (b)(7)(ii)
- any unplanned or extended non-operational periods or temporary closures
- any disturbance of survey monuments, witness corners, reference monuments will be reported 3809.420 (c)(11)(i-iii)

Other Regulatory Agencies

CRLL and the Operator are under the jurisdiction of the Federal Mine, Safety and Health Administration (MSHA). MSHA has its own reporting and monitoring systems for the health and safety of miners. This also includes regulations for high walls, berms, etc. All MSHA correspondence is kept on file and will be available to the BLM Field Office.

The Diatomaceous Earth Quarry has been given an MSHA Mine Number, # 4202325.

State and Federal Highway Agencies regulate the Contractors overland truck equipment. Dust control systems are regulated by the Utah DOT.

The State of Utah, Dept. of Natural Resources has jurisdiction over CRLL's mining activities. Annual reports must be filed with the State. All State correspondence will be available to the BLM Field Office.

Tooele County has zoning regulations that affect CRLL's activities. No annual reports are required. All County correspondence will be available to the BLM Field Office.

3809.401 (b)(4)

MONITORING

Air

Mining activities are the pushing of the Overburden into a stockpile, digging the diatomaceous earth out with a front-end loader, loading the dump trucks and the trucks driving off site, and pushing the Overburden back as a final cover.

Dust will be generated by these activities. CRLL and its Operator are regulated by Federal and State dust control requirements. At the initial campaign mining activity, a dust inventory will be made by a certified third party in order to formulate a dust control plan. The Inventory of activities will determine the best dust control plan and monitoring. All Mining Contractors will be contractually required to adhere to the Dust Control Plan.

- The dust control inventory and plan will be copied to the BLM Field Office and implemented into this Plan of Operations
- any violations that would effect the 3809 Plan of Operations will be reported to the BLM Field Office

CRLL and it Operator will conform to the standards in 3809.420 (b)(1).

Water

No surface water exists on the Diatomics Placer Claim Group. There has been no well drilling to determine if and where groundwater may exist. Any well drilling to discover ground water may in it self cause contamination, therefore no drilling is recommended. Geologically it appears that if groundwater does exist, it is at considerable depth, at least 100 feet, which is well below the maximum depth of the diatomaceous earth material.

As absolutely no foreign substances will be drained, injected, pooled or stockpiled on site there will be no groundwater monitoring.

All Mining Contractors will be contractually required to report any accidental spillage that could affect groundwater. The BLM Office will be notified immediately if an accidental spill occurs and how the spills will be mitigated.

CRLL and it Operator will conform to the standards in 3809.420 (b)(2).

Re-vegetation

All areas of mining disturbance (excluding dirt roads) will have a final cover using the Overburden with its seed bearing horizons. In addition a BLM approved seed mixture and fertilizer will be broadcast over the reclaimed area. Attached is an approved seed mixture from the BLM.

Note: The areas being re-vegetated are in an arid desert environment. Successful re-vegetation is dependent on the yearly amount of rain the area will receive.

Should the first attempt at reseeding be unsuccessful then additional applications and measures will be attempted.

Note: The BLM Field Office will be assisting in monitoring successful re-vegetation and make recommendations if need be. CRLL and its Operator will correspond with the BLM Field Office describing additional work the BLM may request.

Endangered Species

No endangered species or BLM-defined special status species or designated critical habitats have been discovered on the Diatomics Placer Claim Group. No Federal, State or Local Agencies have reported human activities that would affect any endangered species specific to the Diatomic Placer Claim Group.

Should CRLL and its Operator be notified of an endangered species existence, they will work cooperatively with the BLM Field Office.

3809.401 (b)(5)

NON-OPERATIONAL PERIODS

During long periods of non-operation between campaign mining, highwalls will be reshaped to conform as best possible to surrounding topography, an application of seed bearing horizon Overburden will be applied and a seed mixture and fertilizer distributed to minimize erosion and other adverse impacts. The area will be maintained in a safe and clean manner. 3809.420 (a)(2) and (5)

3809.401 (c)(1)

BASELINE

The Plan of Operations is a continuance of the 'Notice: Disturbance of 5 acres or less', activity that started in 2000 and was completed in 2001. The baseline for the 'Notice: Disturbance of 5 acres or less', will be the same for the Plan of Operations. CRLL and the Operator's Plan is for a relatively small operation that will only disturb a small acreage (4 acres) at any one time. It is CRLL's and the Operators intent to work with the BLM Field Office to minimize potential environmental impacts and to prevent unnecessary or undue degradation.

ARCHAEOLOGY – CULTURAL REVIEW

No archaeological sites or artifacts are seen in the area. The Federal BLM has surveyed the immediate area covering 10.6 acres. The Plan of Operations will start removing diatomaceous earth in this area where no archaeological impacts were seen.

The Plan requests BLM's Archaeologists to survey the areas extending beyond the immediate removal area. CRLL will clearly mark the new areas for review on the land and provide a map to the BLM>

Should CRLL, its Operator and Contractors discover any archaeological sites or artifacts the BLM will be notified immediately. 3809.420 (c)(7)

3809.401 (d)

Peck Trucking Company performed the reclamation work for the 'Notice: Disturbance of 5 acres or less' in 2001. Holnam will use Peck Trucking's data to determine the reclamation costs for the Plan of Operations.

It is the operators intent to reclaim after each campaign quarrying period. Each campaign will disturb 4 acres; therefore an any one time only four acres could be left to be reclaimed.

Dirt Road

In addition, if the BLM requests the dirt roads reclaimed, that cost would be incurred. The dirt road is 0.6 miles long and 14 feet wide; the dirt road represents approximately 1 acres of land. A dump truck would be required to haul the limestone base off site.

Reclamation Cost Estimates

The 2001 fee schedule for Peck Trucking Co. was:

- \$125.00 per hour for a D-8 Bulldozer and a Front-end Loader and dump trucks – price includes labor and fuel
- \$45.00 per hour for laborer in the field
- \$600.00 mobilization/demobilization for lowboy truck to transport heavy equipment, per piece of equipment

Estimated time for reclamation work covering 4 acres:

- Contour pit slopes and highwalls – 8 hours - (bulldozer 4 hours, front-end loader 4 hours)
- Push and spread overburden with seed bearing horizons – 8 hours - (bulldozer 2 hours, front-end loader 6 hours)
- Cast seed mixture and fertilizer – 4 hours of labor
- Two mobilizations/demobilizations (one truck for bulldozer, another truck for loader)
- Haul the limestone road base offsite – 8 hours (one dump truck)
- Load dump truck with the front-end loader – 8 hours (one front-end loader)

Calculations:

Contour and remove highwalls

	Hours	Price	Total
Front-end Loader	4	\$125.00	\$500.00
Bulldozer	4	\$125.00	\$500.00

Push and Spread Overburden as final cover

Front-end Loader	6	\$125.00	\$750.00
Bulldozer	2	\$125.00	\$250.00

Cast Seed and Fertilizer

Laborer	4	\$45.00	\$180.00
Mobilization/Demobilization	two	\$300.00	\$600.00
Total for 4 acres			\$2780.00
Total per acre (\$278.00/4)			\$695.00/acre

Reclaim Dirt Road

Front-end Loader	8	\$125.00	\$1000.00
Dump Truck	8	\$125.00	\$1000.00
One time total			\$2000.00

Per acre reclamation cost for the Diatomaceous Earth Quarry - \$695.00 per acre
18% BLM upward adjustment (\$695 x .18 = \$125.00) - \$125.00 per acre
BLM adjusted reclamation cost per acre - \$820.00 per acre

43 CFR 3809 calls for an upward adjustment of 18% for Bonding, therefore Bonding will be \$820.00 per acre.

An additional \$2000.00 will be needed to reclaim the dirt road (at the BLM's request)

3809.554

The area has previously been reclaimed under the 'Notice: Disturbance of 5 acres or less' in 2001. The reclamation activities were successful and the Plan of Operations will continue with the same methods.

Attachments:

Notice: Disturbance of 5 acres or less in 2000 and amended in 2001- U-77753

Detailed USGS Topographic Map showing area for archaeological review - 1" = 800'

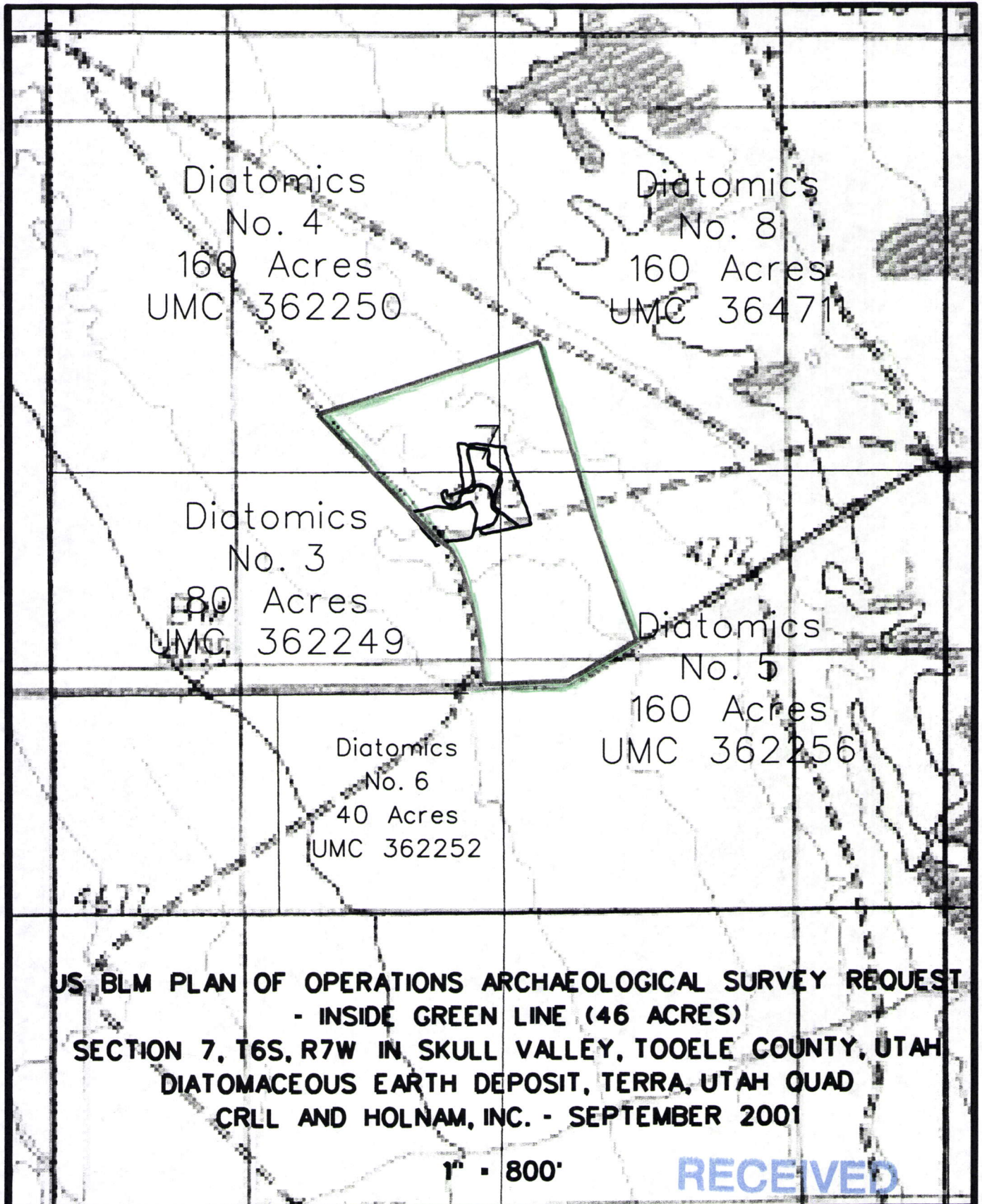
Detailed graphic map showing quarry sequences by year - 1"=800'

Approved BLM seed mixture for reclamation, used in Notice: Disturbance of 5 acres or less in 2000 and amended in 2001 - one page

Detailed USGS Topographic Map showing Diatomics Claim group - 1" = 2000'

Copy of USGS Terra, UT 7.5' topographic map

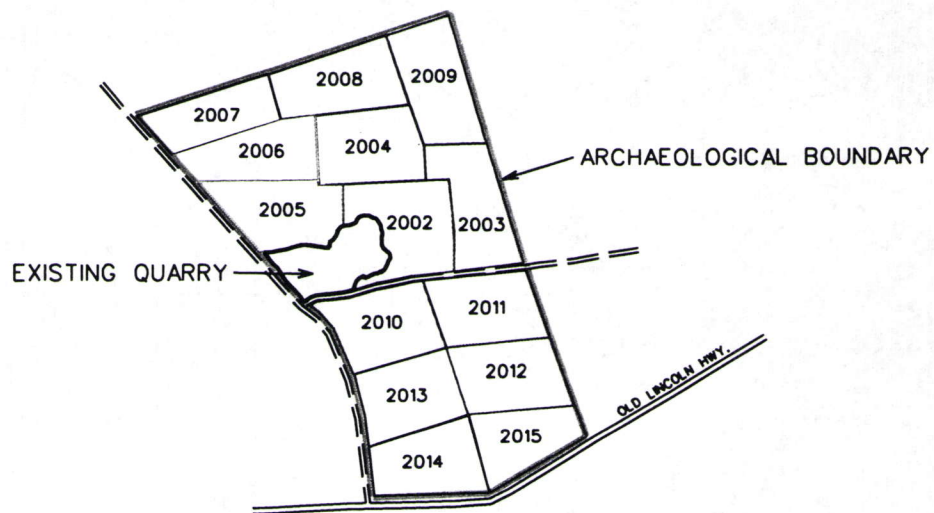
SE. 14 2001



SEP 27 2001

DIVISION OF
OIL, GAS AND MINING

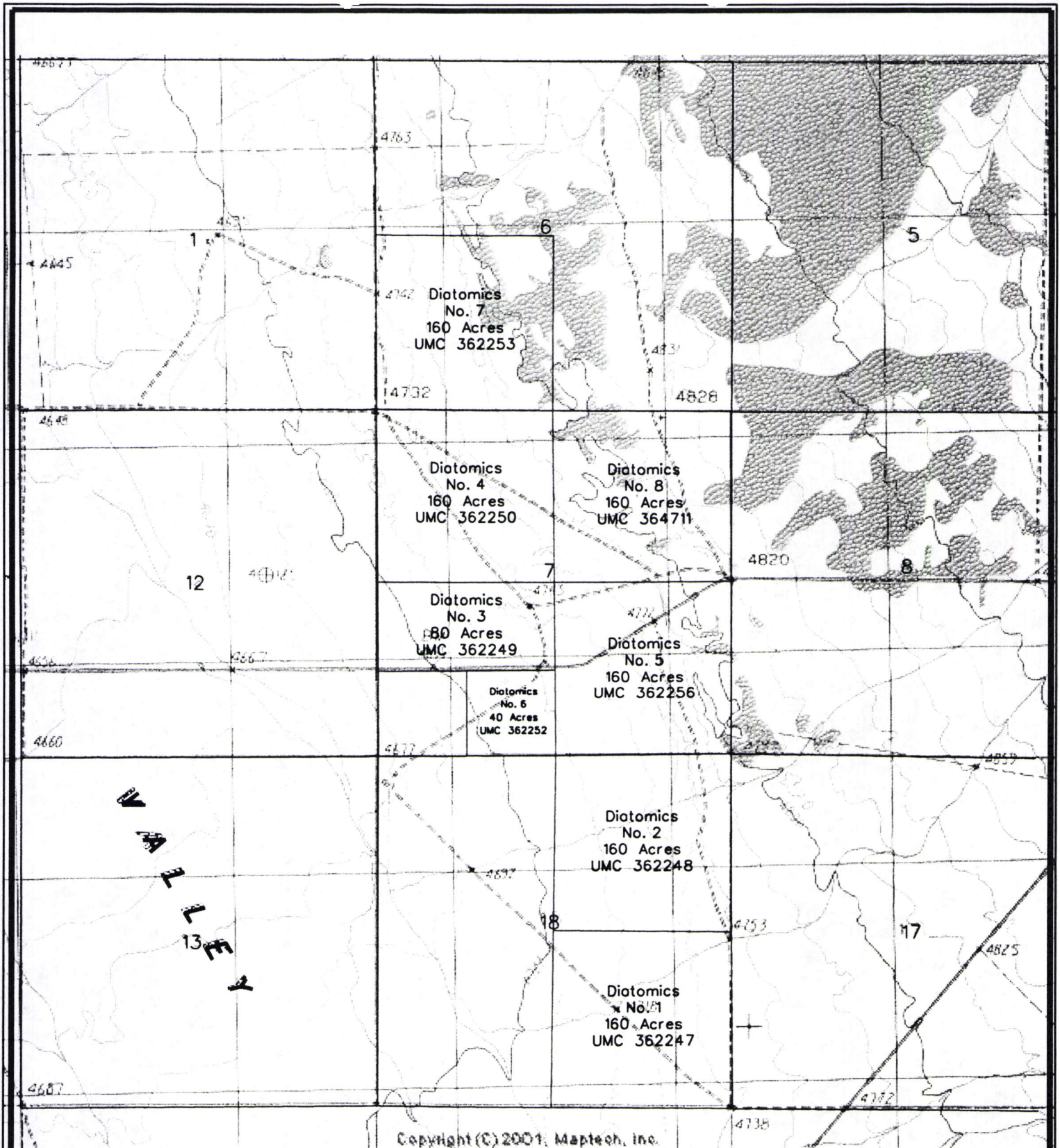
SEP 14 2001



**US BLM PLAN OF OPERATIONS
PROPOSED MINING SEQUENCE BY YEAR IN THREE ACRE BLOCKS
SECTION 7, T6S, R7W IN SKULL VALLEY, TOOELE COUNTY, UTAH
DIATOMACEOUS EARTH DEPOSIT, TERRA, UTAH QUAD
CRLI AND HOLNAM, INC. - SEPTEMBER 2001**

1" = 800'

SEP 14 2001



Copyright (C) 2001, Maptech, Inc.

US BLM PLAN OF OPERATIONS - 43 CFR CH. II,
3809.1-5
SKULL VALLEY, UT AREA - DIATOMICS CLAIMS 1-8,
TOOELE COUNTY, UT
DIATOMACEOUS EARTH DEPOSIT, USGS 7.5' TOPO MAP,
TERRA, UT